

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 407.00

Revision Date: July 13, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Iodine

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Iodine

CAS#: 7553-56-2

SECTION 3 — HAZARDS IDENTIFICATION

Gray-black flakes with a metallic luster and a characteristic odor.

Highly toxic by ingestion and inhalation.

Irritating and corrosive to skin. Avoid all body contact.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-2

Exposure-3

Storage-1

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye: Immediately flush with fresh water for at least 15 minutes.

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, and induce vomiting. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Nonflammable, noncombustible solid.

When heated to decomposition, emits toxic fumes of iodide and various iodine compounds.

Fire Fighting Instructions: Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

None

established

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates, and phosphates. Store in a cool, dry place. Store in a Flinn Chem-Saf bag; the substance sublimates. Frequently oxidizes metal shelves or metal containers in proximity to the iodine. Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire). Exposure guidelines: ceiling 0.1 ppm (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Gray-black flakes with a metallic luster and characteristic odor.
Solubility: Soluble in alcohol and other organic solvents, but not in water.

Formula: I₂

Formula Weight: 253.80

Boiling Point: 185.24 °C

Melting Point: 113.5 °C

Specific gravity: 4.98

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with magnesium, zinc, ammonia, and aluminum. Corrodes steel. Reacts violently with acetaldehyde.

Shelf Life: Fair; the substance sublimes. Frequently oxidizes metal shelves or metal containers in proximity to the iodine.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic, harmful vapor, corrosive, severe lachrymatol, sensitizer, stomach pains, vomiting.

Chronic effects: Dermatitis.

Target organs: Thyroid.

ORL-HUM LD₅₀: 2-4 g for an adult

IHL-RAT LC₅₀: N.A.

SKN-RBT LD₅₀: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please consult with state and local regulations.

Flinn Suggested Disposal Method #12a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Toxic solid, inorganic, n.o.s.

Hazard Class: 6.1 Keep away from food

UN Number: UN3288

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-442-4), RCRA code D002.

SECTION 16 — OTHER INFORMATION

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*
for additional information about laboratory chemicals.**